

LISTING OF CLAIMS

The Listing of Claims will replace all prior versions, and listings, of claims in the application.

Claim 1. (Currently Amended) A modular thermoplastic ~~plastic~~ structural member comprising[[:]] a web section disposed along a horizontal axis[[:]] and one or more flange sections disposed along a horizontal axis parallel thereto and integrally molded to engage the top or bottom surface of said web section, wherein:

the width of said flange sections measured perpendicular to said horizontal axis of said flange section [[to]] is two to ten times the width of said web section measured perpendicular to said horizontal axis of said web section;

the vertical dimension (thickness) of said flange sections are about one-tenth to about one-half the size of the vertical dimension of said web section without any flange sections;

and ~~further wherein~~ said structural member is formed from a co-continuous immiscible polymer blend consisting essentially of:

a high density polyolefin and

a thermoplastic polymer-coated fiber material[[:]] or a thermoplastic polymer having fiber material embedded therein.

Claim 2. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, wherein said high-density polyolefin is high-density polyethylene (HDPE).

Claim 3. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, wherein said fiber material is a carbon or glass fiber.

Claims 4 and 5. (Cancelled)

Claim 6. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, characterized by being an I-Beam.

Claim 7. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, characterized by being a C-Beam.

Claim 8. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, characterized by being a T-Beam.

Claims 9. – 18. (Cancelled)

Claim 19. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1, wherein said composite comprises from about 20 to about 90 wt % of a polymer component that is at least 80 wt % HDPE and from about 10 to about 80 wt % of thermoplastic polymer-coated fibers.

Claim 20. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 19, characterized by exhibiting a compression modulus of at least 350,000 psi. and a compression strength of at least 4000 psi.

Claim 21. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 19, wherein the weight ratio of said thermoplastic polymer to said fiber is between 10:90 and 90:10.

Claim 22. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1 wherein said thermoplastic polymer is selected from ~~the~~ group consisting of polypropylene and polystyrene.

Claim 23. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1 wherein said structural members may be perpendicularly nested within each other.

Claim 24. (Currently Amended) The modular thermoplastic ~~plastic~~ structural member of claim 1 wherein said flange sections form a 90° angle with said web section, such that additional structural members can be nested in the recess formed by said flange sections and said web section and be supported by at least one of said flange sections.